

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method of semaphoring between a system firmware and Advanced Configuration and Power Interface (ACPI) subsystem, the method comprising:

prior to entering a critical section of a shared memory by a first entity, checking, by the first entity, a turn flag to determine if the first entity or a second entity has a turn to access a the critical section of the shared memory, wherein the turn flag indicates if the first entity or the second entity has the turn to access the critical section;

if the first entity has the turn to access the critical section of the shared memory, then changing, by the first entity, a value in the turn flag so that the second entity will have the turn to access the critical section of the shared memory;

if the second entity has the turn to access the critical section of the shared memory, then checking, by the first entity, an In flag of the second entity to determine if the second entity is in the critical section, wherein the In flag of the second entity has a first value if the second entity is in the critical section;

if the second entity is in the critical section, then avoiding to enter the critical section by the first entity until after waiting for the second entity to exit the critical section; and

entering the critical section by the first entity after the second entity exits the critical section, wherein the In flag has a second value if the second entity is not in the critical section.

Claim 2 (currently amended): The method of claim 1, further comprising:

setting an In flag of the first entity to the first value "TRUE" prior to entering the critical section.

Claim 3 (currently amended): The method of claim 1, further comprising:

setting an In flag of the first entity to the second value "FALSE" after exiting the critical section.

Claim 4 (Original): The method of claim 1, further comprising:

if the second entity is not in the critical section, then entering the critical section by the first entity.

Claim 5 (Original): The method of claim 1, wherein the first entity is the system firmware and the second entity is the ACPI subsystem.

6. The method of claim 1, wherein the first entity is the ACPI subsystem and the second entity is the system firmware.

Claim 7 (Original): The method of claim 1, wherein the first entity checks a shared memory to determine priority in the critical section.

Claim 8 (currently amended): An apparatus for semaphoring between a system firmware and Advanced Configuration and Power Interface (ACPI) subsystem, the apparatus comprising:

- a first entity;
- a second entity;
- a shared memory;

a semaphoring system between the first entity and second entity, wherein the first entity is configured to check a turn flag to determine if the first entity or the second entity has a turn to access a critical section of the shared memory, wherein the turn flag indicates if the first entity or the second entity has the turn to access the critical section;

wherein if the first entity has the turn to access the critical section of the shared memory, then the first entity changes a value in the turn flag so that the second entity will have the turn to access the critical section of the shared memory;

wherein the first entity is configured to check an In flag of the second entity to determine if the second entity is in the critical section, if the second entity has the turn, ~~then checking an In flag,~~ wherein the In flag of the second entity has a first value if the second entity is in the critical section;

wherein the first entity is configured to avoid to enter the critical section until after ~~wait for~~ the second entity ~~to exits~~ exits the critical section, ~~if the second entity is in the critical section,~~ and to enter the critical section after exit of the critical section by the second entity, wherein

the In flag has a second value if the second entity is not in the critical section.

Claim 9 (Original): The apparatus of claim 8, wherein the first entity is the system firmware and the second entity is the ACPI subsystem.

Claim 10 (Original): The apparatus of claim 8, wherein the first entity is the ACPI subsystem and the second entity is the system firmware.

Claim 11 (Original): The apparatus of claim 8, wherein the first entity checks a shared memory to determine priority in the critical section.

Claim 12 (currently amended): An apparatus for semaphoring between a system firmware and Advanced Configuration and Power Interface (ACPI) subsystem, the apparatus comprising:

means for checking a turn flag to determine if a first entity or a second entity has a turn to access a critical section of a shared memory, prior to entering a the critical section by a first entity, wherein the turn flag indicates if the first entity or the second entity has the turn to access the critical section;

means for changing a value in the turn flag so that the second entity will have the turn to access the critical section of the shared memory if the first entity has the turn to access the critical section of the shared memory;

means for checking an In flag of the second entity to determine if the second entity is in the critical section of

the shared memory, if the second entity has the turn to access the critical section, wherein the In flag of the second entity has a first value if the second entity is in the critical section;

means for avoiding to enter the critical section by the first entity until after ~~waiting for the second entity to~~ exits the critical section, if the second entity is in the critical section; and

means for entering the critical section by the first entity after the second entity exits the critical section, wherein the In flag has a second value if the second entity is not in the critical section.

Claim 13 (currently amended): An article of manufacture, comprising:

a machine-readable storage medium having stored thereon instructions to permit a computer to perform a method comprising:

prior to entering a critical section by a first entity, checking a turn flag to determine if the first entity or a second entity has a turn to access a the critical section of the shared memory;

if the first entity has the turn to access the critical section of the shared memory, then changing, by the first entity, a value in the turn flag so that the second entity will have the turn to access the critical section of the shared memory;

if the second entity has the turn to access the critical section of the shared memory, then checking an In flag of the second entity to determine if the second entity is in the

critical section, wherein the In flag of the second entity has a first value if the second entity is in the critical section;

if the second entity is in the critical section, then avoiding to enter the critical section by the first entity until after ~~wait for~~ the second entity ~~to~~ exits the critical section; and

entering the critical section by the first entity after the second entity exits the critical section, wherein the In flag has a second value if the second entity is not in the critical section.

Claim 14 (new): The apparatus of claim 8, wherein the first entity sets an In flag of the first entity to the first value prior to entering the critical section by the first entity.

Claim 15 (new): The apparatus of claim 8, wherein the first entity sets an In flag of the first entity to the second value after the first entity exits the critical section.

Claim 16 (new): The apparatus of claim 12, wherein the first entity sets an In flag of the first entity to the first value prior to entering the critical section by the first entity.

Claim 17 (new): The apparatus of claim 12, wherein the first entity sets an In flag of the first entity to the second value after the first entity exits the critical section.

Claim 18 (new): The article of manufacture of claim 13, wherein the first entity sets an In flag of the first entity to the first value prior to entering the critical section by the first entity.

Claim 19 (new): The article of manufacture of claim 13, wherein the first entity sets an In flag of the first entity to the second value after the first entity exits the critical section.